IN THE CLAIM

Please amend the claims as follows.

Claim 1 (Currently Amended):   A computer ~~readable medium~~ system comprising a processor and a data storage space, containing a database accelerator~~,~~ ~~comprising~~ that is comprised of:

- a primary system that holds data records having data items including primary keys, said primary system includes:

    A) primary blocks that store the data records in the order of their primary keys, and

    B) a location table that is positioned in a contiguous region and contains location table entries where said location table entries contain addresses of at least one primary block, ~~that contains in a contiguous region location table entries containing the addresses of the primary blocks~~, any modification to the location table, due to data addition, update, and deletion causing a data modification within the block, causes said primary system ~~transmits~~ to transmit information of a location of any modification in the location table and a content of modification to an accelerator system ~~when any modification occurs to the location table due to data addition, update, and deletion causing a data modification within the block~~; and

- an accelerator system that has a frond location table holding contiguous frond location table entries ~~in a contiguous region~~ indicating the blocks that are identical

to the location table entries of each primary block,

said accelerator system has:

A) a communication mechanism<u>, if any modification occurs to the location table due to the location table due to the data addition, update, and deletion causing data modification within the block, then the communication mechanism receives the modification information from the primary system, and</u> ~~receiving modification information from the primary system when any modification occurs to the location table due to data addition, update, and deletion causing data modification within the block while transmitting information for completing the application of the modification information to the primary system when the modification information is completed and~~

B) a modification information application mechanism ~~performing~~ <u>that performs</u> necessary updating ~~on the basis of~~ <u>based on the</u> modification information transmitted from the primary system, and

C) retrieval ~~by means of~~ <u>mechanism using</u> the primary key ~~on~~ <u>in</u> said accelerator system ~~is such that~~ <u>where the accelerator system frond location table is used to perform a binary search</u> to retrieve the frond location table entries with a target key value to determine an object block and that retrieval relative to the record within the block is performed relative to the primary block or overflow block in the primary system.

Claim 2-7 (Canceled)

Claim 8 (Currently Amended):   A computer ~~readable medium~~ <u>system</u>

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comprising a processor and a data storage, containing a database accelerator, ~~comprising~~ that is comprised of:

a primary system that holds data having data items including primary keys and alternate keys,

primary blocks that store the data records in the order of their primary keys,

alternate key blocks that store~~s~~ the alternate-key entries made up of alternate keys and primary keys in the alternate-key value order, and

an alternate-key location table that contains the alternate-key location table entry in a contiguous region,

if the alternate-key location table is modified as the alternate-key entry within the alternate-key block is modified in the case that alternate-key modification occurs due to data addition, update, and deletion causing a data modification within the block, then said primary system transmits information of a location of any modification in the alternate-key location table such as alternate-key location table entry number and a content of modification to an accelerator system ~~when alternate-key location table is modified as the alternate-key entry within the alternate-key block is modified in the case that alternate-key modification occurs due to data addition, update, and deletion causing a data modification within the block~~; and

an accelerator system that has:

a communication mechanism, where if any modification occurs to the alternate-key location table due to data addition, update, and deletion causing data modification within the alternate-key block, then the communication mechanism receives the modification information from the primary system ~~receiving modification information from the primary system when any modification occurs to the alternate-key location table due to data addition, update, and deletion causing data modification within the alternate-key~~

~~block while transmitting information for completing the application of the modification~~

~~information to the primary system when the modification information is completed~~ and

a modification information application mechanism <u>that performs</u> ~~performing~~ necessary updating ~~on the basis of~~ <u>based on the</u> modification information transmitted from the primary system, and

retrieval ~~by means of~~ <u>using</u> the alternate-key ~~on~~ <u>in</u> said accelerator system ~~is~~ such that <u>the accelerator system frond alternate key location table is used to perform</u> a binary search ~~is performed using the frond alternate-key location table of the accelerator~~ ~~system~~ to retrieve the frond alternate-key location table entries with a target key value to determine an object alternate-key block and that retrieval relative to the record within the alternate-key block is performed relative to the alternate-key block in the primary system.

Claims 9-12 (Canceled)